TANDBERG Video Portal
Data port Command Interface User Guide

Software version V 3
D1392602

TANDBERG

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1. Introduction

The *TANDBERG Video Portal Data port Command Interface User Guide* contains guidelines on how to use the textual command interface supported by the Video Portal system, further referred to as Video Portal. The Data port Command Interface can be accessed through Telnet via the LAN interface or through RS-232 by connecting a serial cable to the serial interface connector, referred to as the *Data port* (ref. chapter 2). Three Telnet sessions can be connected to the Video Portal at the same time in addition to the RS-232 connection.

If, after reading this manual, you require additional information concerning the use of the *TANDBERG Video Portal Data port Command Interface*, please contact your local TANDBERG dealer who will be able to supply you with relevant information for special applications.

2. Connecting to the Data port Command Interface through the RS-232 port.

The RS-232 port is a 9-pin, female, sub-D connector located on the front of the Video Portal. The port is configured as a DCE (Data Communications Equipment). The RS-232 port is default set to 115200 baud, 8 data bits, none parity and 1 stop bit from factory. The RS-232 port is also referred to as *the Data port.*

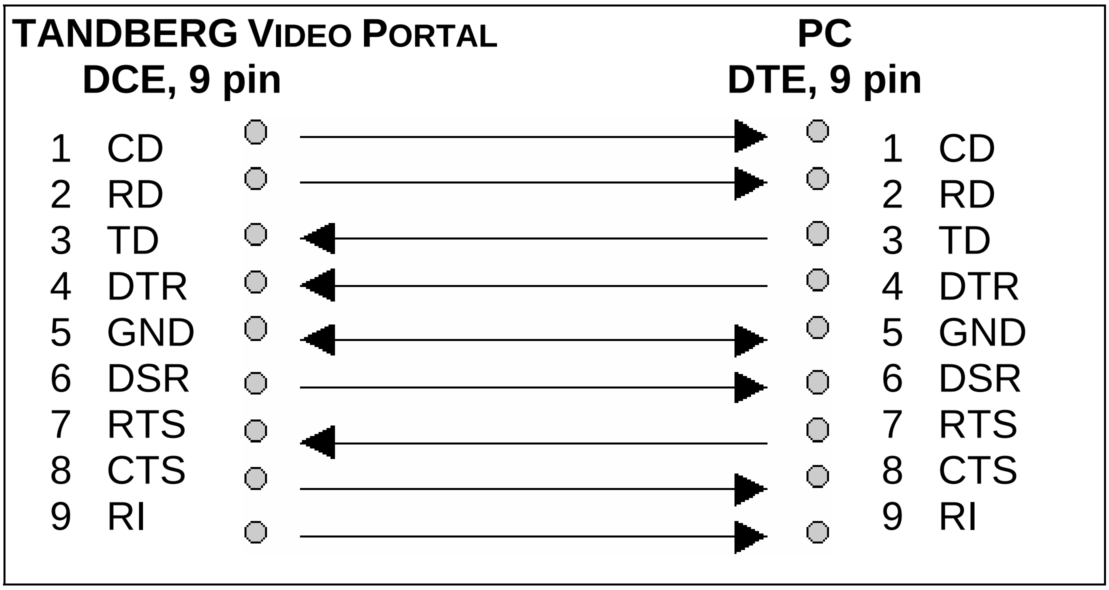
2.1. Hardware and Cabling

The pin outs for the RS-232 are defined in the following table (the DTE, Data Terminal Equipment, could be a PC or other device capable of serial communication).

Pin no	Signal	Description	Direction
1	CD	Carrier detect	To DTE
2	RD	Receive data	To DTE
3	TD	Transmit data	From DTE
4	DTR	Data terminal ready	From DTE
5		Ground	
6	DSR	Data set ready	To DTE
7	RTS	Ready to send	From DTE
8	CTS	Clear to send	To DTE
9	RI	Ring indicator	To DTE

NOTE! A straight through cable should be used between the TANDBERG Video Portal's RS-232 port and the DTE.

The figure below illustrates the recommended cable-wiring scheme for connecting the Video Portal to a PC through RS-232.



DTR and RTS are ignored. DSR, CD, and CTS are always asserted, while RI is not used.

2.2. Troubleshooting

If communication cannot be established between the PC/terminal and the TANDBERG Video Portal's Data port the following should be checked:

- Verify that the serial cable is a straight through 9-pin to 9-pin cable
- Confirm that the configuration of the PC/terminal's serial RS-232 port is identical to the configuration of the TANDBERG Video Portal RS-232 port.
- Verify that the PC/terminal's serial RS-232 port is working properly by connecting it back-to-back to another PC/terminal and send characters in both directions[1].

[1] It requires a null-modem cable to perform this test

3. Connecting to the Data port Command Interface using Telnet

The TANDBERG Video Portal has one LAN port.

The Video Portal's Telnet server provides access to the Data port Command Interface through a 10/100 base T network interface supporting the TCP/IP protocol.

When connected to the Video Portal, type tsh to start a t-shell from the command line. The Telnet client will receive a welcome message similar to the following:

```
Welcome to <System Name>
TANDBERG Video Portal Release V3.0
SW Release Date: 2007-03-13
```

NOTE! If the TANDBERG Video Portal has been protected with an IP password you will be prompted to enter this password before you can access the Data port Command Interface via Telnet.

4. The TANDBERG Video Portal Commands

4.1. Introduction

Typing '**?**' or '**help**' when connected to the Data Port Command Interface will return a list of valid *commands.* The commands are used to control the functions of the Video Portal. A command may be followed by a set of *parameters* and *sub-commands*. This chapter gives a description of all valid commands for the Video Portal.

4.1.1. Command format

Typing '**?**' or '**help**' after a command will result in a *usage text* (*h of help response) being displayed. Usage text gives information about the command format, i.e. valid parameters, sub-commands etc. An example is shown below (the user input is shown in bold).

Xconf DialPlan Entry 1 NetType ?

*h xConfiguration Dialplan Entry [1..64] NetType: <All/H324m/H323/SIP>

"Specifies the type of network to listen for incoming connections."

Numbers 1-64 and All/H324m/H323/SIP are parameters of the configuration (Xconf) command. *Parameters* are arguments on which the command will operate upon. Required parameters are denoted by: < >, while optional parameters are denoted by: [ ]. All possible values for given parameters are separated with slashes (/). For some parameters, only their names are supplied within the brackets. In these cases specific parameter values need to be substituted for the parameter names. Allowed parameter values, unless obvious, are provided when the commands are discussed.

Sub-commands are commands grouped together within a command. Different sub-commands within a command may have different parameter sets. In the example below: **Address** and **Authentication** are sub-commands to the command **H323Gatekeeper.** In the same sense **Mode, ID** and **Password** are sub commands of H323Gatekeeper Authentication.

xconf H323Gatekeeper ?

*h xConfiguration H323Gatekeeper Address: <IPAddr>

*h xConfiguration H323Gatekeeper Authentication Mode: <Auto/Off>

*h xConfiguration H323Gatekeeper Authentication ID: <S: 0, 50>

*h xConfiguration H323Gatekeeper Authentication Password: <S: 0, 50>

NOTE! The Data port Command Interface is not case sensitive.

4.1.2. Command types

The commands can be divided into three major classes:

- Parameter Configuration Commands, Xconf.
- Status Commands, Xstat.

- User Commands, Xcom.

Parameter Configuration Commands are commands that set a system parameter to a specific value. E.g.: The command **Xconf telnet mode: "on"** enables telnet access on the Video Portal. If the command is syntactically correct the Video Portal returns **OK**, otherwise the Video Portal returns **ERROR**. An example is shown below (the user input is shown in bold).

Xconf telnet mode: "on"

OK

When issuing a Parameter Setting Command without a parameter, the Video Portal will return the command with the current setting. E.g.:

Xconf telnet mode

*c xConfiguration Telnet Mode: On

OK

Status Commands are commands that list different sets of system parameters. Status commands are automatically called when corresponding parameters are being changed.

User Commands are commands that allow users to configure operational parameters, like option keys, service and dial plan entry manipulations, disk operations and system reboot.

4.2. The commands

The commands are divided into five groups: System Configuration Commands, General Video Portal Commands, System Status Commands, Debug Commands and Special Commands.

4.2.1. System Configuration Commands

Command:	Description:
lplan	Mapping of a call onto a service or another call. **Dialplan Entry [1..64] Enabled: <On/Off>** **Dialplan Entry [1..64] Name: <S: 0, 30>** **Dialplan Entry [1..64] NetType: <All/H324m/H323/SIP>** **Dialplan Entry [1..64] Prefix: <S: 0, 128>** **Dialplan Entry [1..64] Suffix: <S: 0, 64>** **Dialplan Entry [1..64] ServiceId: <0..64>** **Dialplan Entry [1..64] Property [1..16] Name: <S: 0, 32>** **Dialplan Entry [1..64] Property [1..16] Value: <S: 0, 64>** **Dialplan Entry [1..64] Source [1..8] ID: < 0, 65535>** **Dialplan Entry [1..64] Source [1..8] Path: <S: 0, 128>** --- sub-commands: **Each dial plan has the following general fields, i.e. Dialplan entry details:** • **Enabled –** If the box is checked the service becomes available. • **Name –** The name of the dial plan as represented in the Dialplan Configuration overview. • **Net type –** Inbound call net type; either H324m, H323, SIP or All. All means that independent of the net type the call is accepted on a match with the predefined Prefix and Suffix. • **Prefix -** Number to which the first part of the inbound number (bnr) is matched. The prefix is specified in the dial plan entry. The prefix is stripped from the inbound number. • **Suffix -** Number to which the last part of the inbound number (bnr) is matched. The suffix is specified in the dial plan entry. The suffix is also stripped from the inbound number. The part of the number which remains after stripping both prefix and suffix is called remainder (See also the “useremainder” option in a DID service). • **ServiceId –** Select one of the services as configured in the Services menu item. **Each dial plan has the following service specific fields:** • **Property –** User configurable arguments used within a service. • **Source –** User configurable figures and movies used within the service. **Argument details for the default DID service:** For a dial plan based on a DID service the following Arguments, i.e. properties, can be

	distinguished: • **Net type -** Either H324m, H323 or SIP of the outbound call. • **AV mode –** This mode determines the outbound audio and video call settings. It is either Audio Only, Audio + Video, Auto(matic) no fallback to audio, Auto + fallback to audio and Auto + always fallback to audio. In the “Audio Only” mode a voice call is being setup, even when all endpoints support both audio and video capabilities. In the “Audio + Video” mode a call is only being setup when endpoints support both audio and video capabilities and a call with both these capabilities can be setup. In the “Auto” mode a call is being setup according to the capabilities of the endpoints. Of the latter, 3 versions can be distinguished: no fallback to audio, fallback to audio or always fallback to audio. In the “no fallback to audio” case either an “audio + video“ or an audio only call is being setup, depending on the capabilities choice of the initiating endpoint, i.e. when an “audio + video” call is being setup, whereas the receiving endpoint only supports audio, the call is terminated. In the “fallback to audio” case capabilities can be changed to an audio only call when the receiving endpoint supports only audio, even when an “audio + video“ call is being setup by the initiating endpoint. The “always fallback to audio” case is used in case the telephony switch interferes or cannot handle capability renegotiation, therefore when an “audio + video” call fails automatically an audio call is being setup. • **Prefix –** Specifies the first part, i.e. the part preceding the remainder, of the outbound number. The outbound prefix can be defined under “Arguments”. • **Suffix –** Specifies the last part, i.e. the part appended to the remainder, of the Outbound number. The outbound suffix can be defined under “Arguments”. • **Use remainder -** Specifies whether a particular part, i.e. the remainder, of the inbound number will be used to form a part of the outbound number. For a remainder to become non-zero a specified inbound “Prefix” has to match the first part and/or a specified inbound “Suffix” has to match the last part of an inbound number, however individually or combinations of both never fully match the complete inbound number. Both inbound Prefix and Suffix can be defined under “Dialplan entry details”. When “Use remainder”, is active the previously mentioned “remainder” will be appended to and precede the “Prefix” and the “Suffix” of the outbound number, respectively. The outbound “Prefix” and “Suffix“ precede and append, respectively, the “remainder” as to form the complete outbound number. The latter prefix and suffix can be defined under “Arguments”. Prefixes and suffixes are standard parameters of dial plans. Suppose, as an example, the prefix, inbound, prefix and postfix numbers equal 1234, 9876154, 9876 and 54 respectively then the remainder equals 1 and the outbound number will be 12341. For the same settings with an inbound number 9876254 results in an outbound number 12342. In case the prefix and/or suffix fully match the inbound number the remainder will be empty and the useremainder value will be ignored. • **Allow forwarding -** After call setup the call is offloaded from the Video Portal system, i.e. not routed via the Video Portal system any longer, to free resources. • **Use sub number -** The sub number is a number extension following the main number and is separated from the main number by a "*". In this way a number plan behind a main number can be reached directly. Example of a DID **Dialplan** for mobile to SIP calls: Note: • For DID ServiceId = 1. • avmode equals 1, 2, 3, 4 or 5 for Audio Only, Audio + Video and Auto (no fallback to audio), Auto + fallback to audio or Auto + always fallback to audio, respectively. • useremainder equals 0 or 1, for No and Yes, respectively. *c xConfiguration Dialplan Entry 1 Enabled: On *c xConfiguration Dialplan Entry 1 Name: "H324m - SIP" *c xConfiguration Dialplan Entry 1 NetType: H324m

	*c xConfiguration Dialplan Entry 1 Prefix: "207947133" *c xConfiguration Dialplan Entry 1 Suffix: "" *c xConfiguration Dialplan Entry 1 ServiceId: 1 *c xConfiguration Dialplan Entry 1 Property 1 Name: "nettype" *c xConfiguration Dialplan Entry 1 Property 1 Value: "SIP" *c xConfiguration Dialplan Entry 1 Property 2 Name: "avmode" *c xConfiguration Dialplan Entry 1 Property 2 Value: "5" *c xConfiguration Dialplan Entry 1 Property 3 Name: "prefix" *c xConfiguration Dialplan Entry 1 Property 3 Value: "john.smith" *c xConfiguration Dialplan Entry 1 Property 4 Name: "suffix" *c xConfiguration Dialplan Entry 1 Property 4 Value: "@xyz.com" *c xConfiguration Dialplan Entry 1 Property 5 Name: "useremainder" *c xConfiguration Dialplan Entry 1 Property 5 Value: "0" *c xConfiguration Dialplan Entry 1 Property 6 Name: "allowredirectdid" *c xConfiguration Dialplan Entry 1 Property 6 Value: "0" *c xConfiguration Dialplan Entry 1 Property 7 Name: "usesubnumber" *c xConfiguration Dialplan Entry 1 Property 7 Value: "0" Example of an IVR **Dialplan** for mobile to H323 calls Note: • For IVR ServiceId = 2. • avmode equals 1, 2, 3, 4 or 5 for Audio Only, Audio + Video and Auto (no fallback to audio), Auto + fallback to audio or Auto + always fallback to audio, respectively. *c xConfiguration Dialplan Entry 2 Enabled: On *c xConfiguration Dialplan Entry 2 Name: "H324m - H323" *c xConfiguration Dialplan Entry 2 NetType: H324m *c xConfiguration Dialplan Entry 2 Prefix: "207947132" *c xConfiguration Dialplan Entry 2 Suffix: "" *c xConfiguration Dialplan Entry 2 ServiceId: 2 *c xConfiguration Dialplan Entry 2 Property 1 Name: "nettype" *c xConfiguration Dialplan Entry 2 Property 1 Value: "H323"

	*c xConfiguration Dialplan Entry 2 Property 2 Name: "avmode" *c xConfiguration Dialplan Entry 2 Property 2 Value: "4" *c xConfiguration Dialplan Entry 2 Property 3 Name: "prefix" *c xConfiguration Dialplan Entry 2 Property 3 Value: "" *c xConfiguration Dialplan Entry 2 Property 4 Name: "suffix" *c xConfiguration Dialplan Entry 2 Property 4 Value: "" *c xConfiguration Dialplan Entry 2 Property 5 Name: "allowredirectivr" *c xConfiguration Dialplan Entry 2 Property 5 Value: "0" *c xConfiguration Dialplan Entry 2 Property 6 Name: "DTMFInfoScreen" *c xConfiguration Dialplan Entry 2 Property 6 Value: "On" Example of an TMS Corporate Directory **Dialplan** for H323 calls: Note: For TMS ServiceId = 3. *c xConfiguration Dialplan Entry 3 Enabled: On *c xConfiguration Dialplan Entry 3 Name: "TMS corp. dir." *c xConfiguration Dialplan Entry 3 NetType: H323 *c xConfiguration Dialplan Entry 3 Prefix: "90372001" *c xConfiguration Dialplan Entry 3 Suffix: "" *c xConfiguration Dialplan Entry 3 ServiceId: 4 *c xConfiguration Dialplan Entry 3 Property 1 Name: "tmsaddress" *c xConfiguration Dialplan Entry 3 Property 1 Value: "10.47.1.10" *c xConfiguration Dialplan Entry 3 Property 2 Name: "allowredirectphonebook" *c xConfiguration Dialplan Entry 3 Property 2 Value: "0" *c xConfiguration Dialplan Entry 3 Property 3 Name: "DTMFInfoScreen" *c xConfiguration Dialplan Entry 3 Property 3 Value: "On" Example of a Menu **Dialplan** for H323 calls: Note: For TMS ServiceId = 4. *c xConfiguration Dialplan Entry 4 Enabled: On *c xConfiguration Dialplan Entry 4 Name: "Menu" *c xConfiguration Dialplan Entry 4 NetType: H323

	*c xConfiguration Dialplan Entry 4 Prefix: "90370010" *c xConfiguration Dialplan Entry 4 Suffix: "" *c xConfiguration Dialplan Entry 4 ServiceId: 3 *c xConfiguration Dialplan Entry 4 Property 1 Name: "allowredirectep" *c xConfiguration Dialplan Entry 4 Property 1 Value: "0" *c xConfiguration Dialplan Entry 4 Property 2 Name: "entry1_label" *c xConfiguration Dialplan Entry 4 Property 2 Value: "Secretary" *c xConfiguration Dialplan Entry 4 Property 3 Name: "entry1_nettype" *c xConfiguration Dialplan Entry 4 Property 3 Value: "H323" *c xConfiguration Dialplan Entry 4 Property 4 Name: "entry1_bnumber" *c xConfiguration Dialplan Entry 4 Property 4 Value: "554046" *c xConfiguration Dialplan Entry 4 Property 5 Name: "entry2_label" *c xConfiguration Dialplan Entry 4 Property 5 Value: "Phone Book" *c xConfiguration Dialplan Entry 4 Property 6 Name: "entry2_nettype" *c xConfiguration Dialplan Entry 4 Property 6 Value: "H323" *c xConfiguration Dialplan Entry 4 Property 7 Name: "entry2_bnumber" *c xConfiguration Dialplan Entry 4 Property 7 Value: "90372001" *c xConfiguration Dialplan Entry 4 Property 8 Name: "entry3_label" *c xConfiguration Dialplan Entry 4 Property 8 Value: "Manual Dial" *c xConfiguration Dialplan Entry 4 Property 9 Name: "entry3_nettype" *c xConfiguration Dialplan Entry 4 Property 9 Value: "H323" *c xConfiguration Dialplan Entry 4 Property 10 Name: "entry3_bnumber" *c xConfiguration Dialplan Entry 4 Property 10 Value: "90370003" *c xConfiguration Dialplan Entry 4 Property 11 Name: "entry4_label" *c xConfiguration Dialplan Entry 4 Property 11 Value: "Support" *c xConfiguration Dialplan Entry 4 Property 12 Name: "entry4_nettype" *c xConfiguration Dialplan Entry 4 Property 12 Value: "H323" *c xConfiguration Dialplan Entry 4 Property 13 Name: "entry4_bnumber" *c xConfiguration Dialplan Entry 4 Property 13 Value: "554046"

	*c xConfiguration Dialplan Entry 4 Property 14 Name: "entry5_label" *c xConfiguration Dialplan Entry 4 Property 14 Value: "Menu" *c xConfiguration Dialplan Entry 4 Property 15 Name: "entry5_nettype" *c xConfiguration Dialplan Entry 4 Property 15 Value: "H323" *c xConfiguration Dialplan Entry 4 Property 16 Name: "entry5_bnumber" *c xConfiguration Dialplan Entry 4 Property 16 Value: "90370018"
Ethernet	Sets LAN port speed. *NOTE! The Video Portal needs to reboot before the changes will apply*. **Ethernet <speed>** --- parameters: • **speed: auto/10half/10full/100half/100full.** The speed is either set to auto or manually from 10mb half duplex to 100mb full duplex. When set to auto the Video Portal will automatically negotiate with the network and use the best available setting. Example of **Ethernet** feedback: *c xConfiguration Ethernet Speed: Auto
H323CallSetup	Configures for direct or via gatekeeper calling **H323CallSetup Mode: <Direct/Gatekeeper>** -- Example of H323CallSetup feedback: *c xConfiguration H323CallSetup Mode: Direct
H323Gatekeeper	Sets gatekeeper parameters. *NOTE! H.323 services must be set before the Video Portal can be registered to a gatekeeper*. **H323Gatekeeper Address <IPAddr>** or **H323Gatekeeper Authentication Mode <Auto/Off>** or **H323Gatekeeper Authentication ID: <S: 0, 50>** Or **H323Gatekeeper Authentication Password: <S: 0, 50>** --- sub-commands: • **Authentication Mode** configures the use of authentication against a gatekeeper. • **Authentication ID** Configures the user name used within an authentication challenge • **Authentication Password** sets the password used within the authentication process. *NOTE! Authentication Password is write only.* Example of **H323Gatekeeper** feedback:

	Xconf H323Gatekeeper Authentication **c xConfiguration H323Gatekeeper Authentication Address: “abc.def.ghi.jkl”* **c xConfiguration H323Gatekeeper Authentication Mode: Off* **c xConfiguration H323Gatekeeper Authentication ID: ""*
HTTP	Enables or disables access to HTTP services. *NOTE! Changes become effective after reboot.* **HTTP Mode <On/Off>** Example of **HTTP** feedback: *c xConfiguration HTTP Mode: On
HTTPS	Enables or disables access to HTTPS services. *NOTE! Changes become effective after reboot. Without https no web GUI is available.* **HTTPS Mode <On/Off>** Example of **HTTPS** feedback: **c xConfiguration HTTPS Mode: Off*
IP	Configures the LAN interfaces when static IP address allocation is used. *NOTE! The Video Portal needs to reboot before the changes will take effect.* **IP Assignment: <DHCP/Static>** or **IP Address <IPAddr>** or **IP Address Subnetmask <Subnetmask>** or **IP Address Gateway <IPAddr>** or **IP Address DNS Server [1..5] Address <IPAddr>** or **IP Address DNS Domain Name <S: 0, 64>** --- parameters: • **DNS Server:** Number identifying one of 5 DNS servers which can be configured. If this parameter is omitted the command applies to the first configuration (1). sub-commands: • **Assignment**: Selects between DHCP (Dynamic Host Configuration Protocol) or static IP address allocation. When DHCP is selected the Video Portal will automatically receive all the necessary information from the DHCP server. This function should be used when the Video Portal is connected to a LAN using DHCP. When using this mode, IP-address and IP-subnet mask are not used because the DHCP server supplies these parameters. • **Address:** Sets the static IP address for the given LAN interface. • **Subnetmask:** Sets the subnet mask variable. Subnet mask defines the network class. If the setting is 255.255.255.0 the local network will support up to 256 nodes, denoting a class C network. If the setting is 255.255.0.0 the local network is a class B network with 65536 addressable nodes.

	• **Gateway:** Sets the gateway IP address. If a gateway is located on the LAN and the Video Portal needs to reach nodes through this gateway, the gateway address can be set using the gateway variable (the IP address of the gateway will be set automatically if the Video Portal is in DHCP mode) • **Domain Name:** Sets the domain name string of which the gateway is part of. Minimum 0, maximum 64 characters. Example of **IP Address** feedback: **c xConfiguration IP Address: "127.0.0.1"*
Loadlimit	Sets the processor-load percentage at which calls should be routed to another Video Portal. **LoadLimit: <0..100>** Example of **Loadlimit** feedback: **c xConfiguration LoadLimit: 85*
Services	Displays all configured/uploaded .ivr-file services used in dial plans. **Services Service [1..64] Enabled: <On/Off>** **Services Service [1..64] Name: <S: 0, 30>** **Services Service [1..64] ServiceFile: <S: 0, 128>** **Services Service [1..64] Logging: <On/Off> VP ONLY!!!!!!!!!!!!** sub-commands: • **Enabled: <On/Off>:** Enable the service. • **Name: <S: 0, 30>:** Specifies the name of the service. • **ServiceFile: <S: 0, 128>** Specifies which .ivr file is used as definition of this service. • **Logging: <On/Off>**: Enables the service logging functionality. Example of **Service** feedback: *c xConfiguration Services Service 1 Enabled: On *c xConfiguration Services Service 1 Name: "Direct Inwards Dialing" *c xConfiguration Services Service 1 ServiceFile: "/tandberg/services/did.ivr" *c xConfiguration Services Service 1 Logging: On
Session	Sets a timeout time for sessions like telnet, ssh etc. **Session TimeOut: <0..65535>** Example of Session feedback: **c xConfiguration Session TimeOut: 10000*
SIP	Configures the SIP Proxy Mode and Address settings. **SIP Mode: <On/Off>** or **SIP Interface Server Address <S: 0, 255>** or **SIP Interface Server Type: <Auto/NortelMicrosoft/Cisco/Alcatel/Experimental>**

	or **SIP Interface Transport Default: <TCP/UDP/TLS>** --- sub-commands: • **Mode**: Specifies whether the system uses a default SIP proxy. • **Address:** Specifies the IPv4 address or FQDN of the SIP proxy. • **Type:** Specifies the type of the SIP proxy. • **Transport Default:** Determines which transport type will be used for SIP calls to and from the traversal server. Example of **SIP** feedback: **c xConfiguration SIP Mode: On* **c xConfiguration SIP Interface Server Address: "127.0.0.1"* **c xConfiguration SIP Interface Server Type: Auto* **c xConfiguration SIP Interface Transport Default: UDP*
SNMP	Configures the SNMP. *Note! For more information about SNMP please read the TANDBERG SNMP application note.* **SNMP Mode < On/Off/ReadOnly/TrapsOnly >** or **SNMP CommunityName: <S: 0, 16>** or **SNMP SystemContact: <S: 0, 70>** or **SNMP SystemLocation: <S: 0, 70>** or **SNMP HostIPAddr [1..3]: <IPAddr>** --- parameters: • **Mode:** < On/Off/ReadOnly/TrapsOnly > • **Community Name:** Text string of maximum 16 characters. • **System Contact:** Text string of maximum 70 characters • **System Location:** Text string of maximum 70 characters • **Host IP Addr:** The IP addresses of max 3 SNMP trap hosts sub-commands: • **Mode** enables or sets the mode of SNMP support • **Community Name** is used to authenticate SNMP requests. SNMP requests must have this 'password' in order to receive a response from the SNMP agent in the Video Portal. • **System Contact,** Used to identify the system contact via SNMP tools such as HPOpenView or TANDBERG Management Suite • **System Location** Used to identify system location via SNMP tools such as HPOpenView or TANDBERG Management Suite • **Host IP Addr** identifies the IP-address of the SNMP manager. Up to three different SNMP Trap Hosts can be defined. Your LAN administrator should provide the correct values for these fields Example of SNMP feedback: **c xConfiguration SNMP Mode: On* **c xConfiguration SNMP CommunityName: "public"*

	**c xConfiguration SNMP SystemContact: ""* **c xConfiguration SNMP SystemLocation: ""* **c xConfiguration SNMP HostIPAddr 1: "127.0.0.1"* **c xConfiguration SNMP HostIPAddr 2: "127.0.0.1"* **c xConfiguration SNMP HostIPAddr 3: "127.0.0.1"*
SSH	Enables or disables SSH interface on the Video Portal **SSH Mode: <On/Off>** --- <u>Example of **SSH** feedback:</u> *c xConfiguration SSH Mode: On
SystemUnit	Sets the Video Portal name and password **SystemUnit Name: <S: 0, 50>** or **SystemUnit Password: <S: 0, 16>** --- <u>Parameters:</u> • **Name:** Text string of maximum 50 characters • **Password:** Text string of maximum 16 characters sub-commands • Name, sets the name of the Video Portal • Password, sets the password of the Video Portal <u>Example of **SystemUnit** feedback:</u> *c xConfiguration SystemUnit Name: ""
Telnet	Enables or disables telnet interface on the Video Portal **Telnet Mode: <On/Off>** --- <u>Example of **Telnet** feedback:</u> *c xConfiguration Telnet Mode: On

4.2.2. General Video Portal Commands

Command:	Description:
ExternalManager	This command sets the path and address of the TMS server. A message is sent to TMS when the Video Portal starts up to signal TMS that the Video Portal is ready. **ExternalManager Path: <S: 0, 255>** or **ExternalManager Address: <S:0, 64>** **--** sub-commands: • **Path** • **Address**, the IP address of the manager Example of **ExternalManager** feedback *c xConfiguration ExternalManager Path: "tms/public/external/management/SystemManagementService.asmx" ***c xConfiguration ExternalManager Address: ""**
NTP	This command sets the address of the NTP server. **NTP Address: <S: 0, 64>** **--** sub-commands: • **Address**, the IP address of the server Example of **NTP** feedback *c xConfiguration NTP Address: "131.188.3.220"
Options	View and adapt option keys *NOTE! The Video Portal needs to reboot before the changes will take effect*. **Options [1 .. 64] Key: <S: 0, 90>** --- sub-commands: • **Key**: Option key for e.g. BRI, PRI or SS7 trunks, VP call package. Example of **Options** feedback: **c xConfiguration Options 1 Key: "115201SS7-1-55C3EBB7"* **c xConfiguration Options 2 Key: "115201P1-1-6A96DAA4"* **c xConfiguration Options 3 Key: "115201P1-2-1811D4FA"* **c xConfiguration Options 4 Key: "115201P1-3-79828C53"* **c xConfiguration Options 5 Key: "115201P1-4-B5E5BD4A"*

4.2.3. System Status Commands

Command:	**Description:**
Dialplan	Shows the dialplan configuration. **Example:** *s Dialplan 1: Entry: DialplanEntryId: 1 Enabled: On Name: "H323 - SIP" NetType: H323 Prefix: "9047123456" Suffix: "" ServiceId: 2 Property: Name: "nettype" Value: "SIP" Property: Name: "avmode" Value: "5" Property: Name: "prefix" Value: "" Property: Name: "suffix" Value: "@10.47.8.106" Property: Name: "allowredirectivr" Value: "0" Property: Name: "DTMFInfoScreen" Value: "On" *s/end OK
Disk	Diaplays information regarding the internal harddrive **Disk** Status format: <**Status** > <**CheckDisk**> Parameters: • **Status** is either OK or ERROR • **CheckDisk** indicates whether a disk is present, mounted and can be read or written to. Example of **Disk** feedback **s Disk (status=OK):* *CheckDisk: "Disk present"* *CheckDisk: "Disk mounted"* *CheckDisk: "Can read and write file on disk"* **s/end*

<table>
<tr><td>Ethernet</td><td>Displays the configuration of the Ethernet interface

Ethernet

Status format:
< MacAddress>
<Speed>

<u>Parameters:</u>
MacAddress, The mac address of the Ethernet interface
Speed, The speed of the interface, possible values are Auto/10half/10full/100half/100full.
Example of Ethernet feedback
*s Ethernet:
    MacAddress: "00:0E:0C:5C:B5:7D"
    Speed: 100full
*s/end</td></tr>
<tr><td>ExternalManager</td><td>Displays the configuration of the external management system (e.g. TMS).
ExternalManager:

Status format:
<Address>
<Protocol>
<URL>

Parameters:
Address, The IP address of the external management system
Protocol, the protocol used to access the management system
URL, the URL on the management system that should be opened by the Video Portal in case of status updates
Example of ExternalManager feedback:
*s ExternalManager:
    Address: ""
    Protocol: HTTP
    URL: "tms/public/external/management/SystemManagementService.asmx"
*s/end</td></tr>
<tr><td>Feedback [1.. 3]</td><td>Lists the URL and feedback expressions registered for the given Feedback ID

Feedback

<u>Parameters:</u>
status: on/off Indicates if there is HTTP feedback registered for a given Feedback ID, ref. command FeedbackRegister.
Example of feedback:
*s Feedback 1 (status=Off): /
*s/end

*s Feedback 1 (status=On):
URL: "http://10.47.14.185:8000/"
Expression: "status/call[@status="Synced"]"
Expression: ""</td></tr>
</table>

	Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" Expression: "" *s/end
H323Gatekeeper	Displays the status of the connection with the gatekeeper. **H323Gatekeeper** Status format: **<Status>** **<Address>** **<Port>** --- Parameters: • Status, indicates whether the Video Portal is registered with the gatekeeper • Address, the IP address of the connected gatekeeper • Port, the gatekeeper port the Video Portal is connected with Example of **H323Gatekeeper** feedback: **s H323Gatekeeper (status=Registered):* *Address: "10.47.9.1"* *Port: 1719* **s/end*
IP	Displays the IP configuration of the Video Portal **IP** Status format: **<Address>** **<SubnetMask>** **<Gateway>** **<DNS:** **Server 1:** **Address>** **Server 2:** **Address>** **Server 3:** **Address>** **Server 4:** **Address>** **Server 5:** **Address>** **Domain:**

	Name> --- <u>Parameters:</u> • **Address**, the IP address of the Video Portal • **SubnetMask**, the subnetmask used for the connected network • **Gateway**, the gateway to route traffic to an IP number outside the connected network • **DNS Server [1.. 5] Address**, the IP numbers of maximum 5 DNS servers • **Domain**, the name of the domain the Video Portal is part of. Example of **IP** feedback: **s IP:* *Address: "10.31.0.5"* *SubnetMask: "255.255.248.0"* *Gateway: "10.31.0.1"* *DNS:* *Server 1:* *Address: "127.0.0.1"* *Server 2:* *Address: "127.0.0.1"* *Server 3:* *Address: "127.0.0.1"* *Server 4:* *Address: "127.0.0.1"* *Server 5:* *Address: "0.0.0.0"* *Domain:* *Name: ""* **s/end*
NTP	Returns the IP address of the NTP server. Status format: <**Status**> **<Address>** **<Port>** **<Last Update>** **<Last Correction>** --- Parameters: • Status, indicates whether the NTP server is active or not. • Address, the IP address of the NTP server. • Port, is default 123. • LastUpdate, indicates the last update date and time. • Last Correction, the time correction in seconds. Example of **NTP** feedback: *s NTP (status=Active): Address: "131.188.3.220" Port: 123 LastUpdate: "2006-04-10 15:21:14" LastCorrection: 1 *s/end
Options	Display all installed option keys.

	Options Parameters: ---- Example of **Options** feedback: *s Options: Option 1: Key: "115201P1-1-43F072FC" Description: "1 trunk" *s/end
Service	Displays all configured/uploaded services. **Service** Status format: **Service [1..64]** Example of **Service** feedback: *s Service 1 (status=Active): ServiceId: 1 Enabled: On Name: "Direct Inwards Dialing" ServiceFile: "/usr/local/ividerengine/services/did.ivr" Logging: Off InstallId: 5 *s/end *s Service 2 (status=Active): ServiceId: 2 Enabled: On Name: "IVR" ServiceFile: "/usr/local/ividerengine/services/ivr.ivr" Logging: Off InstallId: 7 *s/end *s Service 3 (status=Active): ServiceId: 3 Enabled: On Name: "TMS Corporate Directory" ServiceFile: "/usr/local/ividerengine/services/tmscorpdir.ivr" Logging: Off InstallId: 9 *s/end
SystemLoad	Returns the current system load in percentage. **SystemLoad** Status format: **SystemLoad <1..100>**
SystemUnit	Displays information regarding the physical system **SystemUnit**

	Status format: **<ProductType>** **<Uptime>** **<Software** **Version>** **Name>** **ReleaseDate>** **Configuration** **Telephony:>** **VideoTelephony:>** **<Hardware :** **Version>** **SerialNumber>** **MainBoard>** **AdditionalBoard>** **Configuration:** **PRI>** **TemperatureCelcius>** **TemperatureFahrenheit>** --- Parameters: • **ProductType**, the name of the product, e.g. Video Portal • **Uptime**, the time the system is running since the last reboot in seconds • Software o **Version**, the unique name of the software o **Name**, o **ReleaseDate**, the time and date of the build of this software o Configuration • **Telephony**, the amount of supported voice channels • **VideoTelephony**, the amount of supported video channels • Hardware o **Version**, software ID o **SerialNumber**, software serial number o **MainBoard**, the ID of the main board o **AdditionalBoard**, indicates extra boards in the box o Configuration: • **PRI**, the amount of PRIs in the target system • **BRI,** the amount of BRIs in the target system • **TemperatureCelcius**, temperature of the main board in Celcius • **TemperatureFahrenheit**, temperature of the main board in Fahrenheit Example of SystemUnit feedback: **s SystemUnit:* *ProductType: "TANDBERG Video Portal"* *Uptime: 15123* *Software:* *Version: "R3.0Beta2 (TEST SW)"* *Name: "test"* *ReleaseDate: "2007-03-21, 17:54"* *Configuration:* *Telephony: 0* *VideoTelephony: 0* *Hardware:* *Version: "EP 1.0"* *SerialNumber: "43A00001"* *MainBoard: ""* *AdditionalBoard: ""*

	Configuration: *PRI:41* *TemperatureCelcius: NA* *TemperatureFahrenheit: NA* **s/end*

4.2.4. Debug Commands

Command:	**Desription:**
Syslog	Enables a real-time log of Bonding, H.221 and H324m, ISDN, RTSP, IVider, and IVider Engine activity. **Note!** H323 and SIP logging is presented using the following command: tsh –a H323 (SIP). **Note!** Logging via the serial port is limited by the speed of the serial port, which might result in loss of logging data. Therefore, it is advised to use Telnet instead. **Syslog <Level> <Mask> <Volume>** <level> = log level, 0-99, 0 turns off log <mask> = bitmask (default=65535): Mask: With this Mask the logging of different components can be turned on. The mask has to be used as a bit mask. H324m: 1 (0x0001) ISDN: 4 (0x0004) RTSP: 8 (0x0008) IVider: 16 (0x0010) Engine: 64 (0x0040) FileStreamer: 128 (0x0080) ContentStreamer: 256 (0x0100) Transcoder: 512 (0x0200) Mux: 1024 (0x0400) Cuil: 2048 (0x0800) <volume> = message volume mask (default=0): Medium: 1 (0x01) High: 2 (0x02) Show timestamp: 4 (0x04) Show IP address: 8 (0x08) Show Process: 16 (0x10) Show Session ID: 32 (0x20) For instance to view the logging of the H324m, Transcoder and IVider components, the mask value equals 1 + 512 + 32 = 545

4.2.5. Special (Xcommand) Commands

Command:	**Description:**
Boot	Reboots the system.

	Example: xCommand Boot *r Result (status=OK): / *r/end OK CUIL reboot request, restarting
CheckDisk	This command shows the presence and the status of the internal harddisk. **Example:** xCommand CheckDisk *r Result (status=OK): CheckDisk: "Disk present" CheckDisk: "Disk mounted" CheckDisk: "Can read and write file on disk" *r/end OK
ClearDialplanEntries	This command deletes all dial plans. **Example:** xCommand ClearDialplanEntries *r Result (status=OK): *r/end OK
ClearServiceEntries	This command deletes all uploaded Services at once. **Example:** xCommand ClearServiceEntries *r Result (status=OK): *r/end OK
DefaultValuesSet	This command is used to restore factory default settings. Issuing this command with no parameters will restore all settings except network settings and option keys. **DefaultValuesSet Level: <1 .. 3>** **Example (restore all default factory setting):** xCommand DefaultValuesSet *r Result (status=OK): / *r/end OK

Dial	This command establishes a dial out to an end point **Parameters:** • **CalledParty: <S:0, 60>** End point to be connected with the service. • **CallingParty: <S:0, 60>** Service telephone number. • **NetType: <All/H324m/H323/SIP>** Nettype of the end point to be called. • **CallType: <Tlph/Vtlph>** Call type is either voice (Tlph), or voice and video (Vtlph). **OK Result parameter:** • **Session ID: <S: 1.. 50>** **Example:** xCommand Dial CalledParty:0612345678 CallingParty: 0207947123 Nettype: H324m Calltype: Vtlph *r Result (status=OK): Dial: "dial:904023_5" *r/end OK
DialplanEntryDelete	This command deletes the indicated entry of a dialplan. **Parameter:** • **DialplanEntryNumber: <1..64>** **Example:** xCommand DialplanEntryDelete: 1 *r Result (status=OK): / *r/end OK
DialplanEntrySwap	This command swaps two dial plan entries in the dial plan list. **Parameters:** • **DialplanEntryNumber: <1..64>** • **DialplanEntryNumber2: <1..64>** **Example:** xCommand DialplanEntrySwap 1 3 *r Result (status=OK): *r/end OK
DisconnectCall	This command disconnects a call either via the Session ID or the Call Leg ID. **Parameter:** • **CallID: <S: 0, 50>** Either the Call leg ID or the Session ID.

	Example: xCommand DisconnectCall ABCD123456 *r Result (status=OK): *r/end OK
EraseDisk	This command wipes all the data from the internal harddisk **Example:** xCommand EraseDisk *r Result (status=OK): *r/end OK
FeedbackDeregister	Command used to deregister XML feedback over HTTP(S). **Parameters:** • **ID: <1 .. 3>** ID for the registration to deregister. **OK Result parameters:** • **ID: <1 .. 3>** **ERROR Result parameters:** • **Cause: <1…>** Cause code specifying why the command was not accepted by the system • **Description** Textual description of the cause code. **Example:** xCommand feedbackderegister id:1 *r Result (status=OK): ID: 2 *r/end OK
FeedbackRegister	Command used to instruct the system to return XML feedback over HTTP(S) to specific URLs. What parts of the Status and Configuration XML documents to monitor are specified by XPath expressions. The system supports issuing feedback to 3 different URLs. The system allows a total of 20 XPath expressions to be registered, with a maximum of 15 for a single URL. **Parameters:** • **ID: <1 .. 3>** ID for the registration. If this parameter is omitted the system uses the first vacant ID. • **URL(r): <S: 0, 256>** The URL to post feedback to. • **Expression: 1 .. 15: <S: 0, 256>** XPath expression **OK Result parameters:** • **ID: <1 .. 3>** **ERROR Result parameters:**

	• **Cause: <1…>** Cause code specifying why the command was not accepted by the system • **Description** Textual description of the cause code. **Example:** xCommand feedbackregister url:http://10.47.14.185:8000 expression.1:status/call expression.2:status/conference *r Result (status=OK): ID: 2 *r/end OK
OptionKeyAdd	Command used to set new option keys. **Parameters:** • **Key(r): <S: 0, 90>** option key NOTE! Always reboot the system after adding option keys, for the option key to take effect. **Example:** Xcommand OptionKeyAdd 115201P1-1-6A96DAA4 *r Result (status=OK): / *r/end OK
OptionKeyDelete	Command used to delete option keys. **Parameters:** • **Key(r): <S: 0, 90>** option key **Example (Delete Option Key nr. 1):** xCommand OptionKeyDelete 1 *r Result (status=OK): / *r/end OK
RestoreDefaultServices	Command used to restore the factory default services. **Example:** Xcommand RestoreDefaultServices *r Result (status=OK): / *r/end OK
ServiceEntryDelete	Command used to delete services from the Video Portal. **Parameters:** • **ServiceEntryNumber(r):** <1..100>

	Example (Delete Service nr. 10): xCommand ServiceEntryDelete 10 *r Result (status=OK): / *r/end OK
ServiceEntrySwap	Command used to swap service numbers. **Parameters:** • **ServiceEntryNumber(r): <1..100>** • **ServiceEntryNumber2(r): <1..100>** **Example (Swap Service nr. 10 & 11):** xCommand ServiceEntrySwap ServiceEntryNumber: 10 ServiceEntryNumber2: 11 *r Result (status=OK): / *r/end OK

General User Commands

About	Shows following system information: Software version: R3.0 Portions of this software are licensed under 3rd party licenses. See the CD accompanying this product for details.
Help or ?	Displays the help menu. **help**
Licence	Shows 3rd party licences **License** Available 3rd party licenses: 1 Miscellaneous GPL-licensed software 2 OpenSSL 3 openssh 4 Less 5 libedit 6 lsof 7 net-snmp 8 popt 9 zlib
Relkey	Sets the release key: **Relkey** 3761349040466652 Shows the release key: **Relkey** *S relkey 3761349040466652
Xfeedback	The special command *xfeedback* lets the user register user defined XPath expressions (with possible *exposure options*) to monitor changes in the data. Whenever there is a change in one or more elements addressed by a registered XPath expression, the part of the element structure containing these changes will be returned. **xfeedback ?** usage: xfeedback register <XPathExpression> or: xfeedback deregister <index> or: xfeedback list or: xfeedback paths - Paths shows all expressions which can be registered. List shows all registered expressions. (note: deregistration with index=0 will deregister all registered expressions) **Examples**:

	"xfeedback register status/call" - to monitor call changes "xfeedback register status/call--" - to monitor only call state changes "xfeedback register configuration" - to monitor all configuration changes
Xhistory	The special command *xhistory* presents the status of the last 255 calls, made to or from the Video Portal,via a cyclic buffer mechanism. *NOTE! If the Video Portal is registered with a Video Portal, the call history can only be shown on the respective Video Portal.* **xhistory ?** usage: xhistory call [1 .. 255] - **Examples**: xhistory call 1 *l Call 1 (type=Vtlph, protocol=H323, direction=Incoming): LogTag: 1 GatewayCallLogTag: 0 RemoteNumber: "9047123456789" Q931Rate: 64 DisconnectCauseValue: 16 Duration: 67 *l/end OK